

Practice Question Hibernate

Html file

```
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<form action="Add" method="post">
Enter the ID : <input type="text" name="id">
Enter the Name:<input type="text" name="fname">
<button>ADD</button>
</form>
<a href="list">Display the list</a>
</body>
</html>
```

HibernateUtil file

```
package com;
import org.hibernate.SessionFactory;
import org.hibernate.boot.Metadata;
import org.hibernate.boot.MetadataSources;
import org.hibernate.boot.registry.StandardServiceRegistry;
import org.hibernate.boot.registry.StandardServiceRegistryBuilder;

public class HibernateUtil {

    private static final SessionFactory sessionFactory;

    static {
        try {
            StandardServiceRegistry standardRegistry = new
StandardServiceRegistryBuilder().configure("hibernate.cfg.xml").build();
            Metadata metaData = new
MetadataSources(standardRegistry).getMetadataBuilder().build();
```

```

        sessionFactory =
metaData.getSessionFactoryBuilder().build();
        } catch (Throwable th) {
            throw new ExceptionInInitializerError(th);
        }
    }

    public static SessionFactory getSessionFactory() {
        return sessionFactory;
    }
}

```

Addproducts servlet

```

package com;
import java.io.IOException;
import java.io.PrintWriter;
import java.util.List;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import org.hibernate.Session;
import org.hibernate.SessionFactory;
import org.hibernate.Transaction;
public class AddProducts extends HttpServlet {
    private static final long serialVersionUID = 1L;
    //    public AddProducts() {
    //        super();
    //    }
    //    protected void doGet(HttpServletRequest request, HttpServletResponse
response) throws ServletException, IOException {
    //    }

    protected void doPost(HttpServletRequest request, HttpServletResponse
response) throws ServletException, IOException {
        try {

            //adding a input product to the database
            String a=request.getParameter("id");
            String b=request.getParameter("fname");
            SessionFactory factory = HibernateUtil.getSessionFactory();
            Session session = factory.openSession();
            Transaction tx = session.beginTransaction();

```

```

        Addproduct add= new Addproduct();
        long a1=Long.parseLong(a);
        add.setID(a1);
        add.setName(b);
        session.save(add);
        tx.commit();
        session.close();
    } catch (Exception ex) {
        throw ex;
    }
}
}

```

Addproducts file

```

package com;
public class Addproduct {
    private long ID;
    private String name;

    public Addproduct() {
    }
    public Addproduct(long id, String name) {
        this.ID = id;
        this.name = name;
    }

    public long getID() {return this.ID; }
    public String getName() { return this.name;}

    public void setID(long id) { this.ID = id;}
    public void setName(String name) { this.name = name;}
}

```

Display products servlet

```

package com;
import java.io.IOException;
import java.io.PrintWriter;
import java.util.List;
import javax.servlet.ServletException;

```

```

import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import org.hibernate.Session;
import org.hibernate.SessionFactory;
public class Displayprod extends HttpServlet {
    private static final long serialVersionUID = 1L;

    protected void doGet(HttpServletRequest request, HttpServletResponse
response) throws ServletException, IOException {
        try {
            SessionFactory factory = HibernateUtil.getSessionFactory();
            Session session = factory.openSession();
            List<Addproduct> list = session.createQuery("from
Addproduct").list();
            session.close();
            PrintWriter out = response.getWriter();
            out.println("<html><body>");
            out.println("<b>Product Listing</b><br>");
            for(Addproduct p: list) {
                out.println("ID: " + p.getID() + ", Name: " +
p.getName() + "<br>");
            }
            out.println("</body></html>");
        } catch (Exception ex) {
            throw ex;
        }
    }
}

```

Addproducts .hgm.xml file

```

<?xml version="1.0"?>
<!DOCTYPE hibernate-mapping PUBLIC "-//Hibernate/Hibernate Mapping DTD 3.0//EN"
"http://www.hibernate.org/dtd/hibernate-mapping-3.0.dtd">
<hibernate-mapping package="com">
    <class name="Addproduct" table="pq">
        <id name="ID" column="ID"></id>
        <property name="name" type="string" column="fname"/>
    </class>
</hibernate-mapping>

```

Hibernate.cfg.xml file

```

<?xml version='1.0' encoding='utf-8'?>

```

```
<!DOCTYPE hibernate-configuration PUBLIC "-//Hibernate/Hibernate Configuration
DTD 3.0//EN" "http://www.hibernate.org/dtd/hibernate-configuration-3.0.dtd">
<hibernate-configuration>
  <session-factory>
    <!-- Database connection settings -->
    <property name="connection.driver_class">com.mysql.jdbc.Driver</property>
    <property
name="connection.url">jdbc:mysql://localhost:3306/**databasename**</property>
    <property name="connection.username">root</property>
    <property name="connection.password">**Databasepassword**</property>
    <mapping resource="Addprod.hbm.xml"/>
  </session-factory>
</hibernate-configuration>
```

Output Screenshots

Enter the ID : Enter the Name:
[Display the list](#)

Product Listing

ID: 1, Name: laptop
ID: 3, Name: TV
ID: 2, Name: Telephone

Enter the ID : Enter the Name:

[Display the list](#)

Product Listing

ID: 1, Name: laptop

ID: 3, Name: TV

ID: 2, Name: Telephone

ID: 45, Name: Table

- └─ Addinganewproduct
 - > Deployment Descriptor: Addinganewproduct
 - > JAX-WS Web Services
 - └─ Java Resources
 - > src/main/java
 - > Libraries
 - build
 - src
 - main
 - java
 - com
 - Addprod.hbm.xml
 - hibernate.cfg.xml
 - webapp
 - META-INF
 - WEB-INF
 - lib
 - antlr-2.7.7.jar
 - byte-buddy-1.12.9.jar
 - classmate-1.5.1.jar
 - FastInfoset-1.2.15.jar
 - hibernate-commons-annotations-5.1.2.Final.jar
 - hibernate-core-5.6.10.Final.jar
 - istack-commons-runtime-3.0.7.jar
 - jandex-2.4.2.Final.jar
 - javax.activation-api-1.2.0.jar
 - javax.persistence-api-2.2.jar
 - jaxb-api-2.3.1.jar
 - jaxb-runtime-2.3.1.jar
 - jboss-logging-3.4.3.Final.jar
 - jboss-transaction-api_1.2_spec-1.1.1.Final.jar
 - mysql-connector-j-8.0.32.jar
 - stax-ex-1.8.jar
 - txw2-2.3.1.jar
 - web.xml
 - index.html